

between the first and second electrode layers.”<sup>1</sup> Nonetheless, the Examiner cites Saito as teaching that “a conventional nonlinear device for driving a liquid crystal display can be fabricated by semiconductor techniques wherein the nonlinear device is placed between the two electrodes of a display.”

We respectfully submit that Saito does not, in fact, show a nonlinear device between the two electrodes of a display. Instead, as shown in Figs. 3 and 4 and as set forth in col. 2, line 62 to col. 4, line 20, Saito contemplates a nonlinear device sandwiched between a signal line 31 carrying synchronizing pulse signals and *one electrode* of the display. The display itself is located *above* (rather than sandwiched between) the contacts that sandwich the nonlinear element, and the second display electrode is itself located above the display.

At col. 4, lines 12-20, the patentees state:

The elongated portions of the electrodes 15-1 and 15-2 thus function as **one electrode of each liquid crystal display cell**. Although not shown, a liquid crystal is coated over the entire surface, and a glass board is disposed on the coated liquid crystal layer. The data lines 32 (see FIG. 2) ... are formed on the glass board in a column direction. Each of data lines 32 also operates as the other electrode of each liquid crystal display cell 33. (Emphasis added.)

Thus Saito, like Kazan, is simply not germane to the present claims. The Examiner recognizes that Kazan does not contemplate a nonlinear element *sandwiched between* display electrodes, and the same is true of Saito. The present claims, unlike the prior art, require just this structure. We have amended the claims to further emphasize the distinction from the cited art.

It should be stressed that the location of Saito’s nonlinear elements outside rather than between the display electrodes is not merely a design choice. The nonlinear elements described

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<sup>1</sup> It is noted that this statement, in ¶4 of the Office Action, contradicts the previous paragraph which states that in accordance with Kazan, “the display and the nonlinear elements [are] disposed between the first and second sets of

by Saito are essentially opaque, and Saito's liquid-crystal display is transmissive; as a result, the area occupied by the nonlinear element is permanently dark and non-switchable. It is for this reason that Saito's nonlinear device is small in area relative to that of the display (as suggested, for example, in Fig. 4) and is located outside the electrode/display structure. If Saito's nonlinear elements were to be located between the display electrodes, as required by the present claims, the entire display area would be permanently dark.

We respectfully submit that this amendment places the application in condition for allowance. Please charge any fee occasioned by this paper to our Deposit Account No. 20-0531.

Respectfully submitted,



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electrodes." It is assumed that the Examiner included the previous paragraph merely for reference purposes.

**MARKED-UP COPY OF AMENDED CLAIM**

1. (Twice Amended) A printable electronic display comprising:
  - a. a first set of display electrodes associated with a first layer;
  - b. a second set of display electrodes associated with a second layer distinct from the first layer and disposed in an intersecting pattern with respect to the first set of electrodes, the first and second sets of electrodes not contacting one another;
  - c. a particle-based, nonemissive display; and
  - d. a plurality of nonlinear elements,

the display and the nonlinear elements being sandwiched between the first and second display electrode layers so as to electrically couple at least some electrodes of the first layer with corresponding electrodes of the second layer at regions of intersection and thereby facilitate actuation of the display by the electrodes at said regions.